minus 0.03° and plus 0.05°. The corrected reading, then, is 192.82° at 72.15 °F.

From Table 1:		
193.0° at 72.0 °F.	=	190.2°
$192.0^{\circ}$ at $72.0~^{\circ}F.$	=	189.1°
Difference	=	1.1°
192.0° at 72.0 °F.	=	189.1°
$192.0^{\circ}$ at 73.0 °F.	=	188.9°
Difference	=	0.2°

The hydrometer difference (1.1°) multiplied by the fractional degree of the hydrometer reading (0.82°)=0.902.

The temperature difference  $(0.2^{\circ})$  multiplied by the fractional degree of the temperature reading  $(0.15^{\circ})=0.03^{\circ}$ .

Proof at 60° F.=189.1+0.902-0.03=189.972°=190.0°. As shown, the final proof is rounded to the nearest tenth of a degree of proof. In such cases, if the hundredths decimal is less than five, it will be dropped; if it is five or over, a unit will be added.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C. 5204))

[T.D. ATF-198, 50 FR 8535, Mar. 1, 1985, as amended by T.D. ATF-381, 61 FR 37004, July 16, 1996]

## § 30.24 Specific gravity hydrometers.

(a) The specific gravity hydrometers furnished by proprietors to appropriate ATF officers shall conform to the standard specifications of the American Society for Testing and Materials (ASTM) for such instruments. Such specific gravity hydrometers shall be of a precision grade, standardization temperature 60 %60 °F., and provided in the following ranges and subdivisions:

Range	Subdivision
1.0000 to 1.0500	0.0005
1.0500 to 1.1000	0.0005
1.1000 to 1.1500	0.0005
1.1000 to 1.2000	0.0005
1.2000 to 1.2500	0.0005

No instrument shall be in error by more than 0.0005 specific gravity.

- (b) A certificate of accuracy prepared by the instrument manufacturer for the instrument shall be furnished to the appropriate ATF officer.
- (c) Incorporation by reference. The "Standard Specification for ASTM Hydrometers," (E 100–72 (1978)), published in the "1980 Annual Book of ASTM Standards" (STP 25 1062 (1980)), is incorporated by reference in this part. This incorporation by reference was approved by the Director of the Federal

Register on March 23, 1981. This publication may be inspected at the Office of Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, and is available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.

(Sec. 201. Pub. L. 85-859, 72 Stat. 1358, as amended (26 U.S.C. 5204); 80 Stat. 383, as amended (5 U.S.C. 552(a)))

[T.D. ATF-198, 50 FR 8535, Mar. 1, 1985, as amended by T.D. ATF-381, 61 FR 37004, July 16, 1996]

## § 30.25 Use of precision specific gravity hydrometers.

The provisions of §30.23 respecting the care, handling, and use of precision instruments shall be followed with respect to the care, handling, and use of precision grade specific gravity hydrometers. Specific gravity hydrometers shall be read to the nearest subdivision. Because of temperature density relationships and the selection of the standardization temperature of 60 °/ 60 °F., the specific gravity readings will be greater at temperatures below 60 degrees Fahrenheit and less at temperatures above 60 degress Fahrenheit. Hence, correction of the specific gravity readings will be made for temperature other than 60 degrees Fahrenheit. Such correction may be ascertained by dividing the specific gravity hydrometer reading by the applicable correction factor in Table 7.

Example: The specific gravity hydrometer reading is 1.1525, the thermometer reading is 68 degrees Fahrenheit, and the true proof of the spirits is 115 degrees. The correct specific gravity reading will be ascertained as follows:

- (a) From Table 7, the correction factor for  $115^{\circ}$  proof at  $68 \,^{\circ}$ F. is 0.996.
- (b) 1.1525 divided by 0.996=1.1571, the corrected specific gravity.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C. 5204))

## **Subpart D—Gauging Procedures**

## § 30.31 Determination of proof.

(a) General. The proof of spirits shall be determined to the nearest tenth degree which shall be the proof used in determining the proof gallons.